

Supplemental Table 1. Novel *Wolbachia* variants introduced to disease vector mosquitoes through microinjection and their effects on reproduction, fitness and pathogen interference

<i>Wolbachia</i> variant	Donor host	Recipient host (year transinfected)	Cytoplasmic incompatibility intensity ¹	Maternal transmission fidelity ¹	Fitness cost relative to wild-type ¹	Pathogen blockage relative to wild-type ¹	Reference for original transinfection
wAlbB ³	<i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2005)	Complete	Complete	Intermediate	Intermediate	(18)
wAlbA/wAlbB	<i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2006)	Low	Incomplete	None	-	(13)
wMelPop	<i>Drosophila melanogaster</i>	<i>Aedes aegypti</i> (2009)	Complete	Usually complete but occasionally lost from laboratory populations	High	High	(11)
wMel ³	<i>Drosophila melanogaster</i>	<i>Aedes aegypti</i> (2011)	Complete	Complete	Low	Low-Intermediate	(16)
wAlbB/wMel	<i>Aedes albopictus</i> and <i>Drosophila melanogaster</i>	<i>Aedes aegypti</i> (2016)	Near-complete	Complete	Intermediate	Intermediate	(10)
wMelCS	<i>Drosophila melanogaster</i>	<i>Aedes aegypti</i> (2017)	Near-complete	Complete	Intermediate	Intermediate	(8)
wRi	<i>Drosophila simulans</i>	<i>Aedes aegypti</i> (2017)	Near-complete	High	Low	Low	(8)
wPip	<i>Culex quinquefasciatus</i>	<i>Aedes aegypti</i> (2017)	Complete	Complete	High	-	(8)
wAu	<i>Drosophila simulans</i>	<i>Aedes aegypti</i> (2018)	None	Usually complete but occasionally lost from laboratory populations	High	High	(3)
wAlbA	<i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2018)	Near-complete	Complete	High	None	(3)
wAlbB ³	<i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2018)	Complete	Complete	Low	Low-intermediate	(3)

wMel ³	<i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2018)	Complete	Complete	None	Low-intermediate	(3)
wAu/wAlbB	<i>Drosophila simulans</i> and <i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2018)	Complete	-	-	-	(3)
wAlbA/wAlbB	<i>Aedes albopictus</i>	<i>Aedes aegypti</i> (2018)	Complete	Complete	-	-	(4)
wAlbA/wAlbB/wMel	<i>Aedes albopictus</i> and <i>Drosophila melanogaster</i>	<i>Aedes aegypti</i> (2018)	Complete, but partially self-incompatible	Low	-	-	(4)
wRi	<i>Drosophila simulans</i>	<i>Aedes albopictus</i> (2006)	Near-complete	High	-	-	(17)
wMelPop	<i>Drosophila melanogaster</i>	<i>Aedes albopictus</i> (2009)	Intermediate	High	High	-	(15)
wPip	<i>Culex pipiens</i>	<i>Aedes albopictus</i> (2010)	Complete	Complete	Intermediate	-	(7)
wAlbA ² /wAlbB ² /wRi	<i>Drosophila simulans</i>	<i>Aedes albopictus</i> (2010)	High	High	-	-	(9)
wMel	<i>Drosophila melanogaster</i>	<i>Aedes albopictus</i> (2012)	Complete	Complete	None	High	(6)
wRivB	<i>Aedes polynesiensis</i>	<i>Aedes albopictus</i> (2014)	Complete	Complete	-	-	(2)
wAlbA ² /wAlbB ² /wPip	<i>Culex pipiens</i>	<i>Aedes albopictus</i> (2015)	Near-complete	-	None	-	(19)
wAlbA ² /wAlbB ² /wMelPop	<i>Drosophila melanogaster</i>	<i>Aedes albopictus</i> (2016)	High	Complete	Intermediate	-	(14)
wMel/wPip	<i>Drosophila melanogaster</i> and <i>Culex pipiens</i>	<i>Aedes albopictus</i> (2018)	Complete	Complete	None	Intermediate	(12)

wAlbA ² /wAlbB ² /wMel	<i>Drosophila melanogaster</i>	<i>Aedes albopictus</i> (2018)	Complete, but partially self-incompatible	High	-	-	(4)
wAlbB	<i>Aedes albopictus</i>	<i>Aedes polynesiensis</i> (2012)	Complete	Complete	-	Low	(1)
wAlbB	<i>Aedes albopictus</i>	<i>Anopheles stephensi</i> (2013)	Near-complete	Complete	Low	Low	(5)

¹Based on laboratory studies but note that outcomes may differ between studies and may depend on host strains and experimental conditions.

² wAlbA and wAlbB occur natively in *Aedes albopictus* and in some cases the resident infections were not removed prior to transinfection, whereas in other cases they were removed.

³ The same variants microinjected into the same hosts by different labs.

Literature cited

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